Rethinking the Development of “Nonbasic” Emotions: 
A Critical Review of Existing Theories

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According to most theorists, “nonbasic” emotions such as shame, guilt, pride, and jealousy do not emerge until the 2nd year of life, despite limited evidence for this proposition. Critical examination of the major theories of emotional development reveals that this belief stems from the assumption that young infants are incapable of interpersonal awareness and that this incapacity is invariably explained in terms of lack of representational skills. Only those theorists who credit infants with interpersonal awareness accept that infants might display “nonbasic” emotions, yet nearly all of these theorists also assume that such awareness is indirect and inevitably representation-mediated. Building upon the few exceptions, a relational alternative is also outlined which can account for the possibility of early “nonbasic” emotions while avoiding the logical problems of representationalist explanations.

Within the literature on early affective development there is growing agreement that a specific group of emotions emerges during the 1st year of life, if not within the 1st 6–8 months, and a different group of emotions emerges during or after the 2nd year. Emotions from the former group are often referred to as “basic” or “primary” emotions, and emotions from the latter group as “complex,” “secondary,” or “self-conscious.” Since we do not wish to adopt the theoretical positions implied by these terms, in this article we refer to the first and second group of emotions by the terms “basic” and “nonbasic,” respectively, in quotation marks. The widely agreed chronological sequence and the emotions belonging to these two groups are reported in Table 1.

The number and variety of developmental psychologists who explicitly
or implicitly support this developmental chronology is impressive. It includes not only well-known researchers and theorists such as Bridges (1932); Piaget (1954, discussed in Zazzo, 1988); Spitz (1965); Mahler, Pine, and Bergman (1975); Stern (1985); Malatesta (Izard & Malatesta, 1987); Harris (1989); Pascual-Leone (1991); Perner (1991); Lewis (1987, 1995); Dunn (1988, 1994); Izard (1994); Rothbart (1994); Stipek (1995); Zahn-Waxler (Zahn-Waxler & Robinson, 1995); and Stroufe (1996), but also a host of lesser known child psychologists, educators, and therapists who ultimately represent the basis of shared psychological knowledge of development. Theories that support this developmental sequence have also been presented by several influential psychologists who are not mainly concerned with issues of emotional development (e.g., Freud, 1930/1961, 1905/1965; Buss, 1980; Kagan, 1984). Indeed, in the past 50 years only a few authors have presented ideas that are somehow at variance with this chronology (e.g., Wallon, 1941; Piers & Singer, 1953; Tomkins, 1962/1963, 1987; Winnicott, 1965; Klein, 1975; Izard, 1978; Nathanson, 1987; Schore, 1991), and to our knowledge only three developmentalists have proposed a radically different chronology (Trevarthen, 1984, 1993a; Barrett, 1995; Mascolo & Fischer, 1995). In brief, as noted by Dunn, “It is now widely acknowledged that during the course of their second and third years, young children begin to express emotions not seen in their earlier infancy: pride, shame, guilt, jealousy and embarrassment” (Dunn, 1994, p. 353, italics added).

This article is motivated by the need to address a puzzling problem with this chronology of development. The problem became apparent to us when we examined the empirical literature and discovered that the belief that “nonbasic” emotions may emerge only during or after the 2nd year of life is poorly supported by the evidence. In fact, not only is there a serious lack of empirical studies confirming the absence of “nonbasic” emotions in the 1st year, but on a closer analysis the available evidence seems to suggest instead that they may actually be present. Curiously, in the literature the positive evidence is either ignored or explained away, as if for some fundamental reason “nonbasic” emotions could absolutely not emerge before the 2nd year. To illustrate this point let us take the space to draw some examples from the limited research on the early development of jealousy, embarrassment, empathic concern, and pride.

<table>
<thead>
<tr>
<th>Year</th>
<th>“Basic” emotions: interest, disgust, joy, distress, anger, sadness, surprise, and fear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>“Nonbasic” emotions: shame, embarrassment, coyness, shyness, empathic concern, “sadism,” guilt, jealousy, envy, pride, contempt, gratitude, and so on</td>
</tr>
<tr>
<td>2nd Year</td>
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or later
In the 19th century several researchers reported jealousy of the mother in babies only 3 to 10 months old (e.g., Stevenson, 1892, and Tracy, 1894, both quoted in Gesell, 1906). Somewhat later Guillaume (1926), Bühler (1930), and Piaget (1932) confidently reported jealousy in babies of about 8 months when other people take their place in the mother’s attentions (e.g., Guillaume pretending to seize his wife’s breast). Although authoritative, these reports are rarely if ever considered in the current literature on emotional development, and both theorists and researchers seem strangely reluctant to consider jealousy in young infants as a serious possibility. In naturalistic settings, Cummings, Zahn-Waxler, and Radke-Yarrow (1981) observed jealousy of affection between others from 10 to 12 months onward, partly confirming earlier observations. Hart, Field, and Del Valle (1998) found that 12-month-olds show jealousy when an adult directs positive attention toward a doll (as opposed to a picture book) and particularly so if this adult is the mother. However, both these sets of authors did not consider younger infants (and the possible problematic implications of their results for the mainstream chronology of the development of emotions). In the only published experimental study including infants definitely younger than 1 year, Masciuch (1988) found that at both 4–5 and 8–9 months about 20% of her subjects reacted with apparent jealousy of their mother’s attention. However, given that within her Kleinian/neo-Piagetian theoretical framework “the actual emotion of jealousy per se would not be expected to appear until later” (p. 19), Masciuch argued that only the 8–9 months-olds were showing “proper” jealousy. Even more astonishingly, in a later article discussing the same data, Masciuch and Kienapple dismissed 8- to 9-month-olds’ jealousy as an “exception” and concluded that “in agreement with cognitive theory” (1993, p. 434) jealousy became more common only during the 2nd year, when the proportion of children reacting with jealousy rose from about 20% to about 40%! (For a similar theory-driven interpretation of these results see also Case, Hayward, Lewis, and Hurst, 1988). In fact, in a recent unpublished study we confirmed previous reports of early jealousy and found that 50% of a group of 5-month-olds cried when watching the mother fondling another infant, whereas only 10% cried when she was talking to other adults (Draghi-Lorenz, submitted).

In the case of other “nonbasic” emotions the bias against their early appearance is a little more subtle, and at face value the evidence may seem to support the mainstream chronology. In what is possibly the only available experimental study considering embarrassment in infants younger than 1 year, Lewis, Sullivan, Stanger, and Weiss (1989) investigated the relationship between embarrassment and recognition of self. The study included 27 infants between the ages of 9 and 24 months. Since most infants who showed embarrassment also showed recognition of self in the mirror, Lewis et al. concluded that embarrassment appears after the emergence of a concept of self, i.e., only during the 2nd year. However, it should be noted that the
younger infants may have not shown embarrassment in front of the mirror for reasons other than a total incapacity to experience this emotion, for instance, precisely because they did not recognize themselves. In fact, closer inspection of the results of this study reveals that when this emotion was measured in a way independent of self-recognition, as many as 21 of the 27 infants must have shown embarrassment (instead of only 10). Given that only 18 children were older than 12 months, this means that according to this measure at least 3 of the 9 younger subjects also showed embarrassment (even if presumably they did not show self-recognition)! Lewis et al.’s data prove that 2-year-olds can experience embarrassment, but fail to prove that younger children cannot. Some recent evidence suggests that expressions of shyness or coyness similar to those previously reported in the 2nd year or later are shown by 2- to 4-month-old infants following the onset of attention from others or the self in the mirror (Reddy, 2000). Further, these expressions are perceived as shy, coy, bashful, or embarrassed by naive adults (Draghi-Lorenz, Reddy, and Morris, submitted).

A similar comment should be made for the development of empathic concern for distressed others—possibly the most studied of all “nonbasic” emotions. In general, the emergence of sympathetic feelings is considered to be positively established when children, apart from showing an appropriate expression, also produce some kind of altruistic intervention. Before this happens, infants are only supposed to feel an undifferentiated form of empathy (if any), alternatively referred to as “emotional contagion,” “global empathy,” or “personal distress” (e.g., Guillaume, 1926; Hoffmann, 1982, 1984; Lennon & Eisenberg, 1987; Bischof-Kohler, 1989, 1991; Eisenberg, 1986, 1992; Zahn-Waxler & Robinson, 1995). However, young infants are incapable of independent motility, their movements are uncoordinated, and the distressed other is often out of their reach. It is also likely that they have a very limited knowledge of how to help someone in distress. It is thus unwise to rely upon “clear cut” altruistic actions to detect the presence (or absence) of empathic concern in young infants. That infants in their 1st year are more likely to react with distress than those in their 2nd or 3rd year (Zahn-Waxler & Radke-Yarrow, 1982) is also not necessarily indicative of a lack of concern, as the latter also react more often with distress when helping is made more difficult (Draghi-Lorenz, 1995). In fact, simple altruistic interventions such as offering objects and gently touching the distressed other can be observed around 12 months (Zahn-Waxler, Radke-Yarrow, & King, 1979; Zahn-Waxler & Radke-Yarrow, 1982; Hoffmann, 1982; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992), and, occasionally,
leaning forward and touching the distressed other has been observed as early as 6 months (e.g., Bråten, 1992; Hay, Nash, & Pedersen, 1981). These earliest interventions are either ignored or explained away as insufficiently differentiated to demonstrate real concern for the other (e.g., Eisenberg, 1992) but, as far as we know, they may well do.

Again, the same could be said about pride. Pleasure at mother’s praise for achievement (real or imputed) has been observed by Reissland (1990) in babies from 2 to 15 months of age. Mothers believed that in this situation their babies were expressing pride. Nevertheless, since similar expressions of pleasure were also displayed by the same infants when kissed, tickled, thrown in the air, and so on, Reissland suggests that young infants were merely responding with pleasure at being the center of attention rather than to a personal sense of achievement and/or to their mothers’ praise. However, this conclusion does not necessarily follow. It is possible that infants express pride as pleasure (as do adults) or that mothers picked up other expressive cues that were not differentiated in the coding scheme used by Reissland (which collapsed together behaviors as diverse as smiling and raising of arms). In addition, despite Reissland’s claim, pleasure in feelings of achievement in the 1st year is a well-documented phenomenon (Yarrow, McQuiston, MacTurk, McCarthy, Klein, & Vietze, 1983, 1984, 1987). Admittedly, these feelings are never referred to as ‘‘pride.’’ Bühler (1930) termed them funktionalust and today they are usually termed ‘‘mastery motivation,’’ ‘‘pleasure in mastery,’’ or ‘‘pleasure in efficacy’’ (after Piaget, 1952, and White, 1959), but the reasons for this terminological exclusion are not totally convincing. In a theoretical article, Stipek has argued that a feeling of efficacy may be a necessary precursor to pride but cannot be regarded as such because ‘‘Lacking symbolic thought, infants’ delight is noncognitive, automatic, and is intrinsically derived’’ (Stipek, 1983, p. 44–45). According to Stipek pride emerges toward the end of the 2nd year, when children allegedly start manifesting ‘‘their interest in (and possibly search for) social feedback to mastery events’’ (Stipek, Recchia, & McClintic, 1992, p. 15; see also for a similar definition of pride Heckhausen, 1988). In ‘‘support’’ of this thesis Stipek et al. (1992) found in an experimental setting that infants from 13 to 21 months old were as likely to smile and look up to an adult after they accomplished a set goal as when the adult accomplished it, whereas children from 22 to 29 and 30 to 39 months old were as likely to smile but more likely to look up when they accomplished it. Stipek et al. also found in a naturalistic setting that infants from the younger group were significantly less likely to call their mother’s attention to their achievement by use of verbal means than the older children. On the basis of these results the authors concluded that infants enjoy ‘‘producing some outcome’’ but ‘‘do not anticipate adult reactions’’ (Stipek et al., 1992, p. 71). However, the percentage of younger infants looking up when accomplishing the set goal was far from zero and in fact not very different from that of children from the two older groups (39, 45, and
In addition, although in the naturalistic setting children were more likely to call their mother’s attention by means of verbal utterances, infants were as likely to exclaim, clap, point, look at mother, and look at, the camera as children were. Finally, “unambiguous pride” (as coded by two observers instructed to use this category conservatively) was observed in the same percentage of infants (13 to 21 months old) and children 22 to 29 months old (18 and 16% respectively). Taken together these results fail to support the idea that pride as defined by Stipek et al. emerges for the first time toward the end of the 2nd year. In fact, although there are no systematic data available, one can find several reports of “showing off” in the second half of the 1st year (Bates, Benigni, Bretherton, Camaiori, & Volterra, 1979; Reddy, 1991; Trevarthen, 1992), a phenomenon clearly involving the repetition of acts including new achievements and skills for eliciting the praise and attention of another. In brief, expressions of feelings of mastery in young infants are not only very similar to expressions of pride in older children, which is an acknowledged point (White, 1959; Piaget, 1962; Stipek, 1995), but they also take place in interpersonal contexts similar to those that researchers use to define expressions of pride in older children.

Part of the problem may indeed arise from the fact that many “nonbasic” emotions do not seem to involve a distinctive facial expression (Izard & Malatesta, 1987; Izard, 1997). However, it does not seem to be the case that researchers and theorists are being cautious in their conclusions because of a lack of clear evidence. Neither does it seem to be the case that authors are simply using different terms (e.g., “joy” and “pride”) for phenomena that they in fact see as different stages in the development of the same emotions (i.e., that we are misunderstanding their terminology). What has been mentioned so far shows that there is a strong bias among developmental psychologists against early forms of “nonbasic” emotions which manifests itself in the following ways: (a) a scarcity of studies specifically investigating these emotions in the 1st year; (b) the “infant unfriendliness” of several operationalizations of these emotions; (c) the different weight given to the same expressive behavior when displayed by infants rather than adults or older children (even when displayed in the same context); and (d) the selective analysis, presentation, and interpretation of the data. So, in brief, this is the problem addressed in this article. Why is there such extensive antagonism to the very possibility of “nonbasic” emotions in the 1st year?

Since the available evidence does not justify this antagonism, presumably it arises from some fundamental theoretical assumptions. To identify these assumptions in this article we review the work of current and past theorists of emotional development. We begin by considering the work of two well-

Interestingly, parents do not show this bias and are quite ready to use “nonbasic” emotions’ labels to describe their infants behavior in several situations (Draghi-Lorenz, unpublished data).
known authors who presented, respectively, the clearest example of the mainstream developmental chronology of ‘‘nonbasic’’ emotions and the most radical alternative available in the literature, namely Michael Lewis and Colwyn Trevarthen. We analyze their theories and tentatively identify two fundamental theoretical polarities that may be responsible for the different chronologies proposed. The validity of this analysis is then ‘‘tested’’ against the changes in the ideas of another important author, namely Carroll Izard, who appears to have somewhat shifted from an earlier more distinctive position which allowed for the early appearance of some ‘‘nonbasic’’ emotions towards one somewhat closer to the mainstream chronology. Several other authors are also more briefly considered, not only to provide a further test of our analysis but also in order to show how widespread the mainstream chronology has come to be among developmental psychologists. The testing of our analysis is concluded with a brief review of two recent models that propose a more continuous view of the development of ‘‘nonbasic’’ emotions, namely the model of Karen Caplovitz Barrett and that of Michael Mascolo and Kurt Fischer. In the conclusions we argue that the resistance toward the very possibility of ‘‘nonbasic’’ emotions in young infants arises from a fundamental denial of possible interpersonal awareness in early life, a denial which itself is due to the pervasiveness of Cartesian dualism in current conceptions of social development. Finally, the theoretical basis for an alternative explanation of the origins of interpersonal awareness and ‘‘nonbasic’’ emotions is briefly outlined, drawing ideas from the ‘‘relational’’ tradition within Psychology as well as from its more recent renaissance.

TWO CONTRASTING THEORISTS: MICHAEL LEWIS AND COLWYN TREVARTHEN

Michael Lewis’ Theory

Lewis’ theory is a prototypical cognitive account of emotional development and may be briefly summarized as follows (Lewis, 1987, 1992a, 1992b, 1993a, 1993b, 1995). According to Lewis there is a group of seven ‘‘basic’’ emotions that develop within the 1st 6–8 months of life. These include interest, joy, disgust, sadness, anger, surprise, and fear. All these emotions are supposed to develop from one or two ‘‘basic’’ emotional dimensions (distress-contentment and (maybe) interest-disinterest; Lewis, 1993a, p. 232) through progressive differentiation and as set by specific cognitive achievements. Lewis does not state which are the cognitive skills required by interest, joy, disgust, and sadness, but for anger he mentions a primitive form of means-ends understanding, the capacity to hold expectancies for surprise, and the capacity to compare events with different emotional valence for fear. After approximately a year of relatively few changes, in the second half of the 2nd year the child is supposed to develop three completely new emotions,
namely empathy, envy, and nonevaluative embarrassment. These emotions are referred to as self-conscious emotions. Self-conscious emotions are supposed to be qualitatively different from the primary ones and to depend on the development of a specific kind of self (the objective self), which, in turn, is supposed to depend on the capacity to represent oneself and the other in a common space and to pay attention to the self as from the stance of an observer. After another year, five further completely new emotions are supposed to emerge: pride, guilt, shame, hubris, and evaluative embarrassment. These are referred to as self-conscious evaluative emotions. Self-conscious evaluative emotions are supposed to depend on the development of the capacity to compare oneself or one’s behavior with an internalized cultural standard, rule, or goal (“SRG”). Depending on the outcome of this comparison (positive or negative), and on whether the evaluation of the self is global or specific, the child might experience “hubris” (positive global evaluation of self), shame (negative global evaluation of self), pride (positive evaluation of a specific behavior or aspect of self), or guilt (negative evaluation of a specific behavior or aspect of self).

The rationale behind the model. Lewis’ model makes some strong and clear theoretical claims. In particular—one may ask—why should (a) objective self-awareness be a necessary condition for all “nonbasic” emotions and (b) internalized SRGs and comparisons be essential to a subset of these? One possible answer is that the relevant issue may be simply one of definition. If one reserves the term “pride,” for instance, only for that pleasurable feeling that arises from the positive conscious evaluation of one’s own action against some internalized standard then, by definition, both objective self-awareness and internalized standards become necessary prerequisites of this emotion as defined here. However, Lewis’ model was not proposed to establish new conventional definitions or identify a specific stage in the development of these emotions, but to describe and explain the “new” emergence of well-known emotions. His use of the term “shame,” for instance, seems to encompass all the emotional phenomena that psychologists and laypeople also mean by its use (see Lewis, 1992b). To answer the above questions we must thus consider how Lewis conceives of the self of younger infants and, especially, their capacity to experience their own emotions and to relate to those of others before objective self-awareness arises.

Lewis seems to believe that the ontogenesis of the human self recapitulates its phylogensis (e.g., 1992b, p. 19), so that the self of the infant before the age of 2 is not yet differentiated from that of any other social species:

The skill of uniquely human self-schema can be said to exist only when objective awareness of the self occurs. . . . This is a meta cognition, it is knowledge of knowledge (Harré, 1984). Until such time the child certainly has a level of self-schema. However, we would maintain that this level of self-schema is in no way different from that level found in any living organism capable of interactive behavior. (Lewis, 1992a, pp. 63–64, italics added)
The idea that the young infant’s self is in no way different from that of a
dog or a goose may well contribute to the idea that infants are incapable of
‘‘nonbasic’’ emotions. ‘‘Nonbasic’’ emotions have been long considered to
be a prerogative of humans or, at the most, of the higher primates. 4

However, it may be more pertinent to note that, according to Lewis, before
objective self-awareness is established infants are not really capable of expe-
riencing emotions, not even basic ones. To use Lewis’ terminology young
infants are supposed to be capable of emotional states but not of emotional
experiences:

Emotional experiences also require a particular cognitive ability—that is, the de-
velopment of a concept of self. Emotional experiences take the form ‘‘I am frightened’’
or ‘‘I am happy’’. In all cases the subject and object are the same (i.e. oneself).
Until an organism is capable of objective self-awareness (Duval & Wicklund, 1972),
the ability to experience may be lacking. Emotional experience requires both general
cognitive capacities . . . and the specific cognitive capacity of self-referential behav-
ior, or what I have referred to as ‘‘consciousness’’ (Lewis, 1993a, p. 227)

Now, one may argue that Lewis’ definition of experience is very specific
and that what he calls a ‘‘state’’ could be viewed by others as a kind of
experience, i.e., that the problem here is one of definition and pertains to
the extent to which ‘‘experience’’ needs to be conscious (in the sense of
self-reflective). However, Lewis himself does not always seem to regard
emotional experiences as necessarily conscious/self-reflective: ‘‘The emo-
tional experience may not be conscious, either. If one is willing to distinguish
between conscious and unconscious experiences, emotional experiences may
occur at different levels of consciousness’’ (Lewis, 1993a, p. 226). In fact,
according to Lewis: ‘‘. . . people may experience their internal states and
expressions and be aware of this experience, or they may experience them
in an unconscious mode in which the conscious perception of the experience
is unavailable’’ (Lewis, 1993a, pp. 226–227, italics added). At this point one
might be excused for feeling somewhat confused. If emotional experiences
specifically require ‘‘consciousness,’’ as in objective self-awareness, how
can we have unconscious emotional experiences? It is unlikely that Lewis’
objective self-awareness can be conscious or unconscious too, as this would
clearly contradict its definition as ‘‘turning attention toward the self, to what
the self knows, to what plans or desires the organism has’’ (Lewis, 1992b,
p. 42). 5 Also, and foremost, if emotional experiences can ‘‘occur at different

4 However, more recently some authors have also argued in favor of ‘‘nonbasic’’ emotions in
a variety of anthropomorphic and nonanthropomorphic animals (e.g., Lorenz, 1991; Masson &
McCarty, 1995; De Waal, 1996), and in the past several pioneering authors have made more
than a functional use of terms such as jealousy, embarrassment, and pride to explain animals’
behavior (e.g., Darwin, 1872; Lorenz, 1954).

5 It also contradicts Lewis’s identification of his objective self-awareness with James’s
(1890), Cooley’s (1912), and Mead’s (1934) objective ‘‘me’’ (as opposed to the subjective
‘‘I’’), with the 2nd-year’s self of Mahler (Mahler, Pine, & Bergman, 1975), the verbal self
of Stern (1985), and the representational self of Emde (1983) (e.g., Lewis, 1990, 1992).
levels of consciousness,” why is it that infants who have not yet developed
the level of consciousness identified with objective self-awareness are denied
the possibility of emotional experiences Tout court?

Clearly, these more specific questions may be answered by the provision
of better refined definitions. However, the fact remains that according to
Lewis young infants are not capable of experiencing (i.e., consciously per-
ceiving) their own emotions. Similarly, because infants are not supposed to
be capable of the necessary distinction between self and other until they have
developed and objective self-awareness, they are also supposedly incapable
of experiencing and sharing the emotions of others: “One would agree that
the development of empathy (and sharing) is possible only through the rec-
ognition of the existence of two selves—one’self and another’self—each
having a separate identity and a separate set of needs” (Lewis, 1987, p. 431).

For the same reason, Lewis believes indeed that young infants cannot en-
geige in interpersonal relationships: “Relationships are based on both direct
and indirect interactions but require a sense of self and an integration of a
self with others as in empathy to give them meaning. This is particularly
ture when we think of the recursive nature of thought. Not only can I think
about how I behave to you and how you behave to me, but I can think about
how I think you think I behave toward you, and you to me” (Lewis, 1987,
p. 432).

For our purposes, this kind of extreme representationalist conception of
both personal and interpersonal awareness is the bottom line. If before con-
ceptual awareness of self and other arises infants are not capable of relating
to others on an emotional and interpersonal level, how could they ever be
jealous of, embarrassed in front of, or concerned for the other? Ultimately,
then, the idea that a conceptual representation of the self is necessary for
‘nonbasic’ emotions is also linked with the assumption that such a represen-
tation is necessary for interpersonal awareness.

Lewis’ representationalist stance may answer also the second question
asked above, i.e., it may explain why some self-conscious emotions (the
self-evaluative ones) are believed to require comparison with internalized
standards, rules, and goals. If we assume that internal representations of self
and other are necessary for experiencing both the self and the other, it would
also be the case that internal representations of SRGs are necessary for the
child to relate to the other’s SRGs and hence feel proud, ashamed, or guilty.
The underlying rationale is the same: The actual self and other (i.e., the two
persons in their immediate appearance) and the actual SRGs given in the
interaction (i.e., as set by their reciprocal observable behaviors) are not suf-
ficient to explain ‘nonbasic’ emotions. According to Lewis their phenomeno-
nological nature needs to be implemented by internal counterparts, i.e., indi-
vidual mental representations. We have already noted how one may be
tempted into arguing that the problem is one of definition. The term self-
evaluative indicates that the source of evaluation is the self, and unless SRGs
are internalized the source of evaluation may be seen to be the other and the emotion could not coherently be called self-evaluative. If this was the case, one could criticize Lewis only for failing to consider forms of pride, shame, or guilt that are generated directly by others’ evaluations. However, the representationalist rationale underlying Lewis’ ideas around the development of interpersonal awareness does not allow for any kind of “other-generated” evaluative “nonbasic” emotion until SRGs are internalized and the subject can generate evaluations of the self by him-/herself. As we have seen, self-reflection or objective consciousness of self is deemed necessary for all “nonbasic” emotions.

It should be also noted that this individualist view leads to the rather peculiar proposition that children younger than 2½ years cannot be proud, ashamed, or guilty however much they are praised, scolded, or accused solely because (supposedly) they do not have internal SRGs. In fact, even older children, when they do not possess the specific SRG for which they are being addressed, should be incapable of these emotions. Finally, even if we were to accept Lewis’ idea that internalization of SRGs and evaluations is necessary for these emotions, why, given that they have an objective self and good representational capacities and are capable of comparisons (as highlighted by Lewis in the description of surprise and fear), should children between 1½ and 2½ years old be incapable of internalizing them? Both these issues are not easy to address within Lewis’ theoretical framework.

In summary, we may say that Lewis’ model depicts a discontinuous course of emotional development characterized by two major changes, or developmental steps, taking place at the ages of 18–24 and 30–36 months respectively. The first step is set by the emergence of specific representational skills. These give rise to a concept of self and, most importantly, the capacity to experience both one’s own emotions and those of others, thus allowing the development of empathy, envy, and embarrassment. The second step is set by the emergence of the capacity to internalize SRGs and evaluations. This internalization gives rise to pride, guilt, hubris, and shame. This developmental course can be explained in terms of two fundamental and interrelated assumptions underlying Lewis’ thinking: (i) the young infant is incapable of “nonbasic” emotions because these depend on specific higher representational skill and (ii) this is so because until these skills emerge the infant cannot experience his/her own emotions nor those of others.

Colwyn Trevarthen’s Theory

Trevarthen’s view of emotional development differs radically from that of Lewis. According to Trevarthen emotions do not depend on the development of representational capacities and infants are credited with some kind of interpersonal awareness (which he calls “intersubjectivity”) since very early on if not from or before birth. In fact, Trevarthen is more concerned with emotions in relation to the development of intersubjectivity than with
emotions *per se* (for instance, he does not provide specific distinctions between or definitions of different levels of emotional development). However, within this framework, he has for long explicitly and repeatedly opposed any reductionist view of infant’s emotionality (e.g., Trevarthen, 1979, 1984, 1993a, 1993b), to the point of claiming that newborns are capable of *all* adult emotions and their different functions: “. . . infants possess at birth, not only a coherent and differentiated emotional system that covers, in miniature, the full range observed in adults (as the hand of an infant, or fetus, has five fingers), but also the distinctions between ‘person-related’, ‘thing-related’ and ‘body-related’ functions of emotions” (Trevarthen, 1993a, pp. 73–74). Yet, and in apparent contradiction with the above, on those rare occasions when Trevarthen itemizes the “full range” of the infant’s emotions, he typically refers to many “basic” emotions but seldom to “non-basic” ones. At times, Trevarthen even seems to suggest that some “non-basic” emotions appear only after the 1st year: “. . . the infant beyond one year of age is moving into an increasingly clear moral as well as cooperative set of relationships, where such feelings as loyalty, jealousy, shame and guilt can be differentiated” (Trevarthen, 1993b, p. 158). To solve this apparent contradiction, let us then look at the emotions that are actually mentioned at the different phases of the development of intersubjectivity.

**Intersubjectivity and emotions.** According to Trevarthen, intersubjectivity emerges from an innate capacity for empathic relatedness with human others (e.g., Trevarthen, 1989, p. 43). He claims that after the 1st month this capacity becomes particularly apparent in the infant’s recognition of expressed emotions and in his or her capacity to react emotionally in a differentiated and appropriate way (e.g., Trevarthen, 1984). In his theory the infant’s exclusive interest in others is indeed what specifies the period of “primary intersubjectivity.” In this period, among possible emotional reactions, Trevarthen mentions “feelings of liking, dislike, shyness, sadness or annoyance, as well as inattention and sleepiness.” (Trevarthen, 1984, p. 140, italics added). Trevarthen also claims that toward the end of this period, around 2–3 months, when faced with unknown others infants may show wariness along with friendliness, “‘teasing aggressiveness,’” shyness, and sometimes fear. In front of a caregiver who is “‘good enough,’” on the contrary, infants are believed to react with positive interest, affectionate pleasure, and joy, although distress—in the form of sadness or anger—might also be shown if the other does not comply with the infant’s desire for positive interaction and affectionate support (e.g., Trevarthen, 1984; Trevarthen & Logotheti, 1989).

The next period, from 3 to 6 months, is characterized by an awakening

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6 Trevarthen borrows this expression from Winnicott, who defines a “‘good enough’” mother as someone who “‘meets the omnipotence of the infant and to some extent makes sense of it’” (Winnicott, 1965, p. 145).
of interest in the physical environment. However, in this period (termed “Games 1,” 1992) Trevarthen also reports the emergence of several new social emotions: laughter (1984), humor and teasing in the form of anticipating mother’s behavior (1988), ritualized “aggression” (1989), “showing off,” joy in success, and consternation in failure (1992). For our purposes, the last two emotions are of particular interest. Trevarthen believes that they appear during interactions with real others, but also when the baby is alone in relation to an imagined, almost internalized other (Trevarthen, 1992, p. 125). In this sense, joy in success and consternation in failure come to be somewhat similar to Lewis’ definition of pride and shame. This interpretation is strengthened by the fact that Trevarthen also reports an increase in self- and other-awareness and early forms of “recognition” of self in the mirror and explicitly refers to the self of this period as the “Social Me” of Mead (1934) and James (1890). As such, this self comes to be remarkably similar to the definition given by other authors to the self of the 2nd year (Emde, 1983; Stern, 1985; Lewis, 1992b). Thus, Trevarthen seems to believe that some “nonbasic” emotions may well be related to the kind of self usually related to recognition in front of the mirror, but also that this self appears long before the 2nd year. It is also important to note that, whereas most other authors believe that prior to the development of this sort of self there is no representational self-awareness (but see Neisser, 1993; Tomasello, 1993), Trevarthen supports a much greater developmental continuity and believes that some early form of such self-awareness is also present by the end of the first 6 months (e.g., Trevarthen, 1992, pp. 112 and 115).

Trevarthen notes that embarrassment also has its origins in the emotional reactions of the second period (1988, p. 51), but he more frequently reports it in relation to the beginning of the third period of the development of intersubjectivity (e.g., 1984, 1988). In this period, spanning from 6 to 9 months and termed “Games 2” (1992), Trevarthen also reports self-initiated teasing, especially in the form of provoking the caregivers’ reactions with the use of “jokes,” little “performances,” and “showing off” (Trevarthen, 1988, p. 51), and toward the end of it he mentions “emotional referencing.” Strictly speaking, emotional referencing is not an emotion (in the literature it is usually known as “social referencing,” e.g., Klinnert, Campos, Sorce, Emde, & Svejda, 1983), but it clearly implies an awareness of the emotions of others in relation to “things” other than the self. In this sense emotional referencing is seen by Trevarthen as an important developmental step bringing together the social and the material world. For our purposes, it is important because this triangular relation (I–Thou–Object) logically implies a prior dialogical relation (I–Thou) which, ultimately, might be the fundamental requirement of several “nonbasic” emotions.

The last period (named “secondary intersubjectivity”) is indeed specified by the development of triadic relations between self, other, and objects, and covers the age span from 9 to about 14 months (Trevarthen & Hubley, 1978).
The most interesting aspect of Trevarthen’s description of this period is that no specifically new emotion is ever mentioned. This may confirm that in his view all emotions are in place by the end of the previous period, i.e., around 8–9 months. This possibility is supported by some general considerations made by Trevarthen upon the role, across the lifespan, of the first and the third level of intersubjectivity. The first level, that of primary or intimate intersubjectivity, is described as the basis of the kind of empathic concern that is shown “when someone who is sick or weak is given sympathetic care” (Trevarthen, 1992, p. 129, italics added). Even more interestingly, Trevarthen argues that the third level (which originates at around 6 months and which he sometimes calls “socially conscious intersubjectivity”) is responsible for the definition of the self in relation to others and for possible “difficulties in presentation” such as “timidity, shame and guilt” (Trevarthen, 1992, p. 130, italics added).

In summary, we may say that within Trevarthen’s model the infant—at least by 6 to 9 months—may well be capable of all emotions, including empathic concern, embarrassment, pride, shame, guilt, and the like, the only exception perhaps being jealousy (to our knowledge mentioned only once and in relation to the 2nd year7). This interpretation is supported by the following general statement, which also explains why Trevarthen does not really propose a specific developmental sequence of emotions as other authors do: “I believe that theories purporting to explain emotional development are describing changes due to developing experience-based (procedural) motives for engagement with the world and developing practical knowledge of how to communicate about relationships, roles, tasks, experiences, meanings, etc., not enrichments of the emotional palate itself” (Trevarthen, 1993a, p. 73, italics added). But let us now turn to the specific processes that, in Trevarthen’s theory, allow intersubjectivity and hence the emergence of “non-basic” emotions in the 1st year.

**Empathy with a ‘virtual other’?** Trevarthen repeatedly claims that the origins of interpersonal relatedness are independent of any form of higher individual cognitive capacities: “The core of the functions of a human consciousness appears to be an immediate, irrational, unverbalized, conceptless, totally atheoretical potential for rapport of the Self with the Other’s mind” (Trevarthen, 1993b, p. 121). In fact, according to Trevarthen, emotions themselves should be understood as the fundamental regulators of interpersonal contact: “. . . emotions may be defined as direct intermental manifestations of motives between individuals who in their relationship are persons. Emotions communicate about, and give value, to the probable action of a person in relation to other persons” (Trevarthen, 1984, p. 136).

Accordingly, besides stressing the infant’s capacity to feel and express

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7 In fact, Trevarthen is quite open to the possibility of early jealousy (personal communications, 1997, 2000).
emotions, Trevarthen also stresses the importance of the infant’s capacity to be affected by emotional expressions of the other. Expression and recognition of expression are put forward as the processes underlying interpersonal relatedness. In turn, the recognition of expression is explained by Trevarthen with some kind of innate and immediate empathic response: “Communication with persons is possible from birth, and we should not be surprised at this. It is the nature of human consciousness to experience being experienced, to be an actor who can act in relation to other conscious sources of agency, and to be a source of emotion while accepting emotional qualities of vitality and feeling from other persons by instantaneous empathy” (Trevarthen, 1992, p. 121 italics added).

But what exactly does Trevarthen mean by instantaneous empathy, and how does he explain it? In some recent writings, Trevarthen (1989, 1992, 1993b) often refers to an idea that, apparently, might provide an explanation of empathy and therefore interpersonal relatedness. This is Bråten’s idea that the origins of intersubjectivity are to be found in an innate “virtual other” that is inherent to the newborn’s mind (e.g., Bråten, 1992). From this point of view, the potential for intersubjectivity, before the real other is ever encountered, arises from the dialogical nature of the individual mind itself: “In the organized mind of every human there is formed a ‘virtual other’ (Bråten, 1987), who is prepared to take part in a set of ‘virtual engagements’ with the ‘self’. This dual constitution of the human mind, ‘virtual other’ and ‘self’, is essential and innate. It becomes active and develops when an actual other meets the self” (Trevarthen & Logotheti, 1989, p. 40).

At this point a brief digression on Bråten’s idea of a “virtual other” is needed. According to Bråten (1992), such a “virtual other” is fundamentally different from a “symbolically represented other” in that it allows for “felt” or “presentational immediacy” (as opposed to representational mediacy). This is supposedly so because Bråten defines the “virtual other” as something that is neither the actual other nor its representation, but rather “something” that is coupled with the self of the newborn in the same operational way in which an unspecified affectionate and available caregiver could be. Thus, rather than being a “picture” or representation of the other, the “virtual other” is described as occupying a “space” within the newborn’s mind that can be filled by the affectionate and available caregiver so that intimate contact can take place: “When two participants engage in mutual felt immediacy, each filling the virtual companion space of the other, they may be said to be engaged in (comm)union” (Bråten, 1992, p. 81).

However, the explanatory advantage of Bråten’s “virtual other” over the more traditional representational account is not entirely clear. While it rede-

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8 It is interesting that as an exemplification of the kind of phenomena that this “virtual other” could explain, Bråten reports an example of empathic concern at 26 weeks (Bråten, 1992).
fines the problem in ‘‘operational’’ terms, it still invokes a pregiven structure
within the infant’s mind that acts as another individual—some other-than-
self homunculus—when the infant comes to meet an actual other (again, as
if the actual other could not provide sufficient information about its existence
and nature). Thus, as in standard representationalist explanations, Bråten’s
virtual other reduces the dialogical to a property of the individual mind and,
at the same time, still does not specify the processes involved in our capacity
for interpersonal awareness. If we relate to others on the basis of our relation
with the virtual other, how do we relate to the virtual other to start with? In
fact, Trevarthen, having used the idea of a virtual other to explain the dialogi-
cal constitution of the mind, continues somewhat circularly to appeal to the
dynamic and ‘‘value-carrying’’ nature of emotions to explain how exchanges
between the self and the other (whether virtual or actual) are regulated:
‘‘Regulating the changes of engagement between the self and the other, vir-
tual or actual, are emotions; these are dynamic by nature and are organized
as a set or field of values with a number of oppositions. . . . They arise from
the virtual self-other relationship and are, normally, immediately reactive to
the expressed emotions of actual others’’ (Trevarthen, 1993, p. 40). Obvi-
ously, this kind of argumentation brings us back to the starting point, where
intersubjectivity is explained in terms of recognition of expressed emotion,
which in turn is explained in terms of empathy. To avoid the risk of circularly
using the virtual other to explain the dialogical nature of emotions and then
using emotions to explain how the virtual other is related to the self, the
only viable alternative is, ultimately, simply to identify the two with each
other. A similar operation has indeed been carried out by Trevarthen in the
hypothesis of an Innate Motive Formation generating emotions and expecta-
tions regarding others’ expressive and emotional behavior, i.e., generating
a virtual other (Aitken & Trevarthen, 1994).

From Trevarthen’s writings, we may conclude that in his view by the 6th–
9th months of life forms of empathic concern, embarrassment, pride, shame,
and guilt should already be well developed. Although Trevarthen seldom
uses these terms when describing the emotional life of young infants and
has once claimed that some ‘‘nonbasic’’ emotions cannot be differentiated
until the 2nd year (see quote at the beginning of this review of his work),
his model definitely allows the presence of forms of most ‘‘nonbasic’’ emo-
tions from very early on. In fact, we may even conclude that according to
Trevarthen emotional development is a continuous process where, at any
given period, we can find some form of all the emotions that characterize the
adult life. This is so because according to Trevarthen (i) emotions (including
‘‘nonbasic’’ ones) are primary and independent from higher representa-
tional skills and (ii) some capacity for interpersonal awareness is given from
birth (if not before). For our purposes these are certainly the main points of
difference with Lewis. However, it must be also noted that when Trevarthen
calls upon the ‘‘virtual other’’ to explain early empathy, he seems to be
running into similar problems to those presented by standard representationalist accounts. In fact, at times he has claimed the need for some very simple form of representation of the other and/or the self for interpersonal relatedness (such as innate “maps” of the human body allowing “re-cognition” of self and other, personal communications, 1997, 2000). Thus, although his account is often a nonrepresentationalist account of emotional development, at times Trevarthen does seem to slip into an almost nativist-representationalist position.9

A TENTATIVE ANALYSIS, IZARD, AND OTHER AUTHORS

In summary, within the current literature one can find two extremely contrasting theories of emotional development. The first, Lewis’, does not allow for “nonbasic” emotions until the 2nd and the 3rd years and the other, Trevarthen’s, allows for several if not all “nonbasic” emotions well within the 1st year. Now, one may (again) wonder whether the difference here is merely one of different use of the same terminology. Unlike Lewis, Trevarthen does not distinguish between “basic” and “nonbasic” emotions, nor, for reasons of theoretical focus, does he provide detailed descriptions and definitions of the different emotions (whether “basic” or “nonbasic”). In principle, some room for cases of “homonymy” is therefore available. However, as a matter of fact Trevarthen’s use of “nonbasic” labels appears to be similar to Lewis’ and, indeed, most psychologists’ and laypeople’s. The term “embarrassment”, for instance, is used by both authors in reference to self-conscious behaviors displayed in front of another person and associated with more or less uncomfortable feelings of “having” to perform or the performance not really “working” (e.g., Lewis et al., 1989; Trevarthen, 1988, p. 51). In fact, “heteronymy” seems to be more frequent than homonymy, so different labels are used to refer to emotions that are similarly defined (e.g., Trevarthen’s “joy in success” and “consternation in failure” and Lewis’ “pride” and “shame”). Finally, it should be also noted that Trevarthen and Lewis are both referring to some newly developing capacity for self-conscious emotions and are not focusing on different stages in an otherwise agreed-on course of emotional development. Thus, the case is that these authors are presenting strikingly different developmental chronologies of the same emotions. Comparing the assumptions behind these chronologies, we can indeed discern two fundamental polarities that may help us explain the antagonism against early “nonbasic” emotions.

The first is a polarity between opposing representationalist and nonrepresentationalist accounts of the development of “nonbasic” emotions. The question here is whether the development of “nonbasic” emotions is dependent on or independent of the development of specific representational skills.

9 We should stress that we are not referring to symbolic representation a la Piaget, but to much simpler forms of representation.
Lewis takes a very definite stance on this issue, stating that ultimately “non-basic” emotions depend on the development of conceptual representation. Trevarthen’s position is certainly different, but slightly more ambiguous. On the one hand he clearly challenges such an extreme cognitivist position, suggesting that “nonbasic” emotions (in fact, all emotions) are primary and independent of the development of complex representational skills. On the other hand, his use of Bråten’s idea of a “virtual other” to explain empathy and his reference to innate “maps” seems to suggest that, at times, even Trevarthen calls upon some “otherlike” structure pregiven in the infant’s mind. Possibly, the resort to this “soft” (and nativist) form of representationalism is unintentional and may be due more to the lack of a well-developed theoretical alternative than anything else.

The second is a polarity, more often implicit, between the attribution and the nonattribution of a capacity for interpersonal awareness to infants. The question here is whether young infants are capable of some level of awareness of self and others as different psychological beings. In particular, this level seems to be identifiable with the capacity to experience one’s own emotions and relate to and eventually share those of others from a sufficiently differentiated position. Here, more than in the previous case, the positions of Lewis and Trevarthen are radically different. According to Lewis this level of interpersonal awareness is not achieved by the infant until the 2nd year, whereas according to Trevarthen it is given from birth, if not even before (e.g., Trevarthen, 1993a). Lewis seems to believe that the development of awareness of self and others has to recapitulate its phylogensis, whereas Trevarthen believes that infants cash in much more from previous evolution. This puts Trevarthen in a position to credit infants with early forms of “nonbasic” emotions, unlike Lewis.

However, how far can we extrapolate from these authors to the wider literature insisting upon the impossibility of early “nonbasic” emotions? In other words, are representationalism and a conception of the young infant as incapable of interpersonal awareness really responsible for the widespread denial of the possibility of early “nonbasic” emotions? To answer this question we now consider the model presented by Izard and, more briefly, some relevant ideas from other developmental psychologists.

**Carroll Izard’s Theory**

In its better known version Izard’s model highlights the role of a limited set of innate, categorical, and supposedly cognition-independent emotional responses—interchangeably referred to as basic, fundamental, or primary emotions. Izard’s model also predicts the appearance of two other kinds of affective responses, namely patterns of emotions and affective-cognitive structures. We first consider the development of “basic” and “nonbasic” emotional phenomena and then Izard’s view on the relation between emotional development, representation, and interpersonal awareness. As is
shown, while some of Izard’s older writings show that he was once clearly
open to the presence of several early forms of (our) “nonbasic” emotions, the
most recent ones suggest that now he may be more open to the main-
stream chronology of emotional development. The corresponding changes
in his thinking around the nature of these emotions come thus to provide an
opportunity to test the validity of the analysis carried out so far.

“Basic” emotions and their development. The original list of “primary”
emotions proposed by Izard was inspired by Tomkins (1962/1963) and in-
cludes nine discrete emotions: interest, joy, surprise, fear, anger, sadness,
disgust, contempt, and shame (e.g., Izard, 1977, 1978). The development of
these “basic” emotions is supposed to be set by the maturation of the af-
fective system and to be totally independent of representation. In particular,
interest and disgust are supposed to be present from birth, joy as expressed
by smiling is supposed to develop between the 3rd and the 6th weeks,10 anger
between 2 and 4 months, full-fledged sadness at 3–4 months (but compo-
ents of this expression as early as the 1st week), and fear between 7 and
9 months. As for contempt (as expressed in moments of “triumph”) and
shame (seen as the root of shyness and guilt), Izard suggested that elements
of these emotions can be traced at 4–6 months and in the second half of
the 1st year respectively. In fact (following Tomkins), at one point he even
suggested that shyness/shame can be experienced by infants only 2–3
months old (Izard, 1978, p. 188).

Since then, Izard has suggested that shyness and guilt—previously consid-
ered derivatives of shame—are also discrete “basic” emotions, thus bring-
ing the total of the list up to 11 emotions (e.g., Izard & Malatesta, 1987).
More recently, Izard has conceded that the model “is open to the question
of the number of basic emotions and the best labels for them” (Izard, 1992,
p. 562). Some have argued that the lack of a consistent list of “basic” emo-
tions shows the uselessness of the very concept of “basic” emotion (Or-
tony & Turner, 1990), but a slightly longer list of “basic” emotions does not
necessarily affect the theoretical structure and explanatory power of Izard’s
model. For our purposes, it is more important to notice that Izard’s more
recent writings seem to reject some predictions and theoretical points which
he had made earlier. Indeed, Izard now appears to accept the mainstream
view that shame, shyness, guilt, and contempt are late-emerging emotions
or, at the least, does not appear to discuss it. As he notes: “. . . the emergence
of shame, shyness, guilt and contempt has not been studied systematically,
but a number of investigators have presented evidence or theory suggesting

10 Elsewhere, Izard (1978) also considers the possibility of some kind of enjoyment related
to the neonatal smile. However, he also notes that since the neonatal smile occurs mainly
during rapid eye movement (REM) sleep, enjoyment can be thought to be associated with
this specific expression only on the basis of a facial feedback hypothesis (the so-called James–
Lange or ideomotoric hypothesis).
that signs of these emotions . . . are observable in the first half of the second year of life” (Izard & Malatesta, 1987, p. 507). Elsewhere Izard (1991) still suggests that shyness may emerge around 4 months, but this now seems to be an exception in his thinking around these emotions. In the same writing he argues that “Before children can experience guilt, they must reach an age where they are capable of understanding that they can do things that harm others” (Izard, 1991, p. 367) and seemingly accepts that this first happens around 1 1/2 years. This suggests that Izard is also coming to review his previous claims about the fundamental independence of all (his) basic emotions from cognition. Answering the question “What develops in emotional development?” he notes that: “. . . an individual cannot respond with contempt or shame until maturation and cognitive development have enabled the acquisition of a sense of self and self–other discrimination” (Izard, 1994, p. 356, italics added).

Now, Izard has never really provided a detailed timetable for the emergence of these emotions, neither in the past nor more recently. However, in general these excerpts suggest that starting from a more distinctive position where he argued for the independence of all his “basic” emotions from cognition and their early appearance, Izard has shifted toward a more standard cognitive-developmental position and is now open to a later date of appearance (if not for shyness, at least for guilt, shame, and contempt). Furthermore, for many years Izard has been reserving a special cognitive status for other “nonbasic” emotions in his list of affective-cognitive structures or emotion-cognition complexes.

**Affective-cognitive structures and their development.** According to Izard, the repeated experience of particular combinations or sequences of “basic” emotions leads to the development of *patterns of emotions*. The interaction of these emotions (and patterns of emotions) with cognition leads to the development of *affective-cognitive structures*. These two kinds of affective derivatives include “nonbasic” emotions such as pride, love, hostility, jealousy, and the emotional reactions associated with empathy as well as more stable aspects of affectivity such as personality traits and psychological disorders such as depression and anxiety. Both these affective derivatives, but especially affective-cognitive structures, can vary widely in terms of complexity and, hence, age of appearance (Izard & Malatesta, 1987).

Again, Izard does not give specific dates for the appearance of each of these affective derivatives—but within his theory some general predictions can be easily made. Each pattern of emotions is only dependent upon the development of the “basic” emotions that it involves and might therefore be expected as soon as the infant has repeatedly experienced the combination that characterizes it. Hence, we might expect a variety of patterns of emotions at the latest around 6 months, when a good number of “basic” emotions are supposedly in place. The same logic applies to affective-cognitive structures. These structures should be expected as soon as the infant (in addition to the
relevant “basic” emotions) has also developed the specific cognitive skills required. If the cognitive skills required are not particularly complex, some affective-cognitive structures may appear fairly early. On the other hand, if the cognitive skills required are more complex, then the affective-cognitive structure in question may be late-appearing. The latter seems to be the case, according to Izard, with several emotions of our interest:

Anxiety, depression, hostility, love, jealousy, and pride are examples of affective-cognitive structure or emotion-cognition complexes. . . . the foregoing categories are considered not fundamental emotions but emotion-cognition complexes or affective-cognitive structures that typically involve patterns of fundamental emotions, imagery, ideation and other cognitive processes . . . we propose that they emerge after most of the fundamental emotions are functional and after the infant has begun to label emotions and comprehend their causes and consequences. (Izard & Malatesta, 1987, p. 498)

Here, Izard clearly accepts the idea that emotions belonging to our grouping of “nonbasic” emotions are late-appearing (children do not begin to label emotions until the 2nd or 3rd year) because they are dependent on prior and rather complex cognitive developments. So, one may ask, what is the difference between these emotions and Izard’s “basic” emotions that are also dependent on cognitive development, such as shame, contempt, and guilt? Izard’s answer seems to be that the experiential component of “basic” emotions is discrete and innate, even if it does not emerge until the development of specific cognitive skills (e.g., Izard, 1994), whereas that of affective-cognitive structures is the result of the combination of prior “basic” emotional experiences and new cognitive skills (e.g., Izard & Malatesta, 1987). In this sense, the experience of “basic” emotions such as shame or guilt is even more different from the experience of earlier emotions than that of cognitive-affective structures such as jealousy and pride. However, and most interestingly, at present according to Izard (1994) the self–other distinction implied in all these emotions depends on the development of complex cognitive skills, and this is—we suspect—the real change that has taken place in his ideas. So let us compare Izard’s past and present views of the relation between emotion, cognition, and self–other differentiation.

Emotion, cognition, and self–other differentiation. Originally, Izard was known to adopt the view that the development of emotions leads to the development of self–other differentiation and related cognitive skills (e.g., Izard, 1978). In fact, Izard argued that the origins of consciousness and relatedness are fundamentally emotional: “…the first structures of consciousness are essentially affective in nature, and it is by means of affective experiences and expressions that the infant relates to the objects and persons in the surrounding world” (Izard, 1978, p. 172). Obviously, within a similar conception of the nature of interpersonal awareness the way is open for the early appearance of some “nonbasic” emotions. Izard believed indeed that: “As Tomkins has suggested, shame or shyness can occur at any time after the
infant has the capacity to discriminate self from other and familiar persons from strange persons. This can occur as early as the third or fourth month of life...” (Izard, 1978, p. 188).

In this passage Izard’s position on early interpersonal awareness seems clearly to be the opposite of that taken by Lewis and close to that taken by Trevarthen. At the time Izard proposed that “basic” emotions such as shyness and guilt foster the development of awareness of self and others rather than vice versa. Take, for instance, the case of the relation between guilt and cognition of the self and note how Izard treats emotion rather than cognition as primary: “Guilt... motivates cognitions about self-initiated actions that cause harm to others. Guilt plays an important role in the development of self-responsibility, and it is the principal experiential motivational factor in the mature conscience” (Izard, 1978, p. 193). However, as his more recent conceptualization of several of our “nonbasic” emotions seems to have somewhat moved toward a standard cognitive-developmental view, so does his conceptualization of self–other differentiation. At present, according to Izard the self–other differentiation implied by our “nonbasic” clearly depends on the maturation of “higher order cognitive processes”; “...cognitive development and social learning, are involved in the emerging capacity to respond with emotions like contempt, shame and guilt. The emergence of these emotions is coordinated with cognitive development because they are a function of self-consciousness, social comparison, and other higher order cognitive processes” (Izard, 1994, p. 357).

In brief, although he once accepted the possibility of early interpersonal awareness and (some) “nonbasic” emotions, more recently Izard has to some extent tied interpersonal awareness and “nonbasic” emotions to a cognitive-developmental schedule. In Izard’s more recent theorizing the unproblematic attitude toward the assumption that “nonbasic” emotions are late-emerging correlates with a similar acceptance of the late emergence of the associated level of interpersonal awareness and a shift toward a representationalist account (Izard does indeed define cognition in terms of representation, e.g., Izard and Malatesta, 1987). In other words, as he seems to have accepted (or at least not to discuss) the late emergence of “nonbasic” emotions, Izard has partly traversed both the theoretical polarities identified by our comparison between Lewis’ and Trevarthen’s models. This “case study” provides converging evidence for our view that the belief that “nonbasic” emotions are late-appearing may be a theoretical consequence of the representational assumption and/or the assumption that young infants are not capable of interpersonal awareness. So, let us now consider a few more authors to see how widely agreed this belief is and how often it is really tied to one and/or the other of these two assumptions.

Other Examples of the Mainstream Position

An influential author who has recently presented a rather exhaustive model of emotional development similar to that of Lewis is Sroufe (1996). In partic-
ular, even if Sroufe (e.g., p. 64) claims that infants are capable of some kind of affective experience (whereas Lewis seems to deny this possibility), as far as the relation with the other is concerned, he considers the young infant’s emotional life to be as limited as does Lewis. Sroufe even claims that during the first few months the infant’s affective reactions should not be regarded as true emotions because they are fundamentally undifferentiated and lack the criterial feature of being event-related: “When no distinction is made between inner experience and surround, no “connections” can be made; there can be no subject–object relation, and therefore no emotional reaction as defined here” (Sroufe, 1996, pp. 59–60). In his model, the infant starts off with “physiological prototypes” (endogenous smile, distress, and startle), progresses toward “precursor” emotions during the first few months (pleasure, frustration, and wariness), and develops the first clear-cut event-related emotions between 6 and 9 months (joy for being an active agent, anger for being restricted in actions, and fear of strangers) (p. 64). These developments are seen as the result of a progressive differentiation between self and nonself due to developments in memory and recognition (pp. 70–71). Sroufe then claims that some time after 18 months the appearance of the objective self allows a more complex form of differentiation between self and other that, in turn, leads to the development of “both further differentiation and transformation of already present emotions and the emergence of new ones” (p. 198). As examples of the first he mentions defiance and affection (self–other differentiated forms of anger and joy respectively), and as examples of the second he mentions shame and positive self-evaluation (a precursor of pride). In accord with Lewis, Sroufe suggests that the emergence of this kind of self is caused by the emergence of representational thought and that some “self-conscious” emotions, namely guilt and pride (but not shame), develop only after the 3rd and 4th year “when with continued differentiation of the self there is identification and internalization of standards” (p. 72; see also pp. 199–200).11

A similar account of emotional development can also be found among many psychoanalysts. Spitz (1965), for instance, claims that the first 3 or 4 months are characterized by confused and undifferentiated states of pleasure or unpleasure; that fear and frustration appear between 4 and 6 months, anxiety “‘proper’” between 6 and 8 months; and love, possessiveness, envy, and jealousy appear toward the end of the 1st year. In Spitz’s account, this sequence is supposedly set by the development of the perception of the other as a different physical being, and jealousy, envy, and love are here merely

11 Sroufe and Lewis use a virtually identical terminology and set very similar chronologies for the development of “nonbasic” emotions (except for shame, which Sroufe groups among the self-conscious emotions emerging in the 2nd year). However, Sroufe seems to erroneously suggest that his model is different because Lewis does not differentiate between self-conscious and self-evaluative emotions and believes that they emerge in the same periods (Sroufe, 1996, p. 200).
intended as emotions similar to those that we may feel for objects (in brief, as different forms of object-possessiveness). In relation to the 1st year of development emotions like empathic concern, pride, shame, shyness, embarrassment, guilt—namely emotions that necessarily entail the perception of another person as a different emotional or psychological being—are not even mentioned. Following Spitz’s reasoning these may appear only after the ages of 2 or 3, when the child has supposedly become capable of more complex forms of object relations, i.e., some form of interpersonal relatedness. As Anna Freud notes in her preface to Spitz’s book The First Year of Life:

When discussing the infantile personality in the preverbal period, Dr. Spitz opposes all those analytic authors who ascribe to the infant soon after birth a complex mental life in which fantasy content, conflicts between opposing drives, guilt feelings, tenden- cies of reparation, etc., play a part. Instead, he upholds the view, shared by many, of an initial undifferentiated state and of the slow and continuous unfolding of the functions, instinct drives, gradations of structure, i.e., of psychological processes emerging gradually from the physiological prototypes which underlie them.

He pursues the same theory of slow-motion development from primitive to more complex forms where the main theme of his book, the development of the first object relationship, is concerned. Here, again, he rejects the concept of an object relationship to the mother from birth. . . . (A. Freud, 1965, p. viii)

Another set of very influential psychoanalysts—Mahler, Pine, and Bergman (1975)—claim that the psychological differentiation of the child from the mother begins only well into the 2nd year, with the appearance of representational intelligence. In this sense, Mahler et al. refer to representational intelligence as one of the two “midwives of psychological birth”12 (the other being free locomotion). It is only then, they claim, that the child shows shyness and empathy; wants to share his achievements (pride?); and can be envious, jealous, or possessive. They place the onset of jealousy and envy at around 15 months13 (Mahler et al., 1975, p. 91), shyness and the beginning of empathy at around 18–20 months (Mahler et al., 1975, pp. 96–97), and make no mention of emotions such as guilt and shame.

A similar reductive view of the young infant’s socioemotional capacity seems also to be underlying some recent theories of the development of the “theory of mind” (e.g., Perner, 1991; Harris, 1989). Although emotional development is not the primary concern of these theories, this view is clearly suggested by some interesting comments that connect “nonbasic” emotions

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12 The dualism implied in a position that sets different ages for the appearance of physical and psychological differentiation is rather extreme. However, even more astonishing is the fact that the authors have called their book The Psychological Birth of the Infant, as if this should be considered to appear later than the infant’s biological birth.

13 Spitz and Mahler et al. mention envy, jealousy, and love at different ages, but for our purposes it is more interesting to notice the common principle underlying their rationales, namely that when an emotion entails awareness of self and/or other that goes beyond physicality it simply cannot appear before the 2nd year.
and the development of awareness of self and other. Perner (1991), for instance, states that empathy for another person’s distress (in the form of concern) emerges at around 18 months together with mirror recognition—the most commonly used measure of the presence of a concept of self—because this is when the child develops the capacity to hold in mind “multiple mental models” (that of himself when distressed and that of the other person, as well as that of himself in reality and himself in the mirror): “Thus, empathic responses and self-recognition in the mirror both require the ability to think in multiple situations” (Perner, 1991, p. 133).

Harris (1989, p. 3), who has devoted particular attention to children’s understanding of emotions, suggests that the understanding of another person’s feelings is based upon a kind of “imagination” that allows for self-awareness, pretense, distinction of pretense from reality and, thus, the development of a “working model” of the other person that children use to predict other people’s emotions desires and beliefs (on the base of the model’s output to different pretense inputs). According to Harris (1989), this working model typically allows for the appearance during the 2nd year of intentional hurting and comforting (as they imply “understanding” of another’s pain and to which we referred to as “sadism” and concern). 14

Neither Harris nor Perner explicitly give specific dates for the development of other “nonbasic” emotions, such as pride, shame, and guilt. However, the logic of both their models suggests that similar emotions could hardly develop before the 2nd year. The realization of the other’s emotional attitude toward oneself that is needed for pride and shame would arguably require the same ability to think in multiple situations, or internal working model of the other, supposedly required by “sadism” and concern. In addition, if young infants are incapable of concern for another’s welfare, it is unlikely that they can feel guilty when they cause another person’s distress.

**Examples of Somewhat Different Positions**

A similar view on empathic concern can be also found in the writings of Stern. This author attributes the emergence of “acts of empathy” (such as helping a distressed other) to the development of the verbal or objective self that follows the appearance of symbolic representation in the 2nd year (Stern, 1985): “It is also beginning around this time (eighteen months) that empathic acts are seen . . . To act empathically the infant must be able to imagine both self as an object who can be experienced by the other and the objectified other’s subjective state” (Stern, 1985, p. 166). Although Stern does not seem to provide any explicit date of appearance for other “nonbasic” emotions, he agrees with Lewis that “self-conscious emotions” such as shame, guilt,

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14 One anonymous reviewer has noted that Harris is primarily interested in representations of emotions rather than in emotions themselves. However, Harris makes an explicit connection between such representations and the very possibility of experiencing certain emotions.
and embarrassment require ‘‘self-reflection’’ (Stern, 1993, p. 209). It seems therefore unlikely that in his view these emotions would emerge any earlier than does empathic concern.

However, Stern, who has made important contributions to the reevaluation of the young infant’s sense of self and other and capacity to share emotions, also states that:

Between the seventh and ninth month of life, infants gradually come upon the momentous realization that inner subjective experiences, the ‘‘subject matter’’ of the mind, are potentially shareable with someone else. . . . This discovery amounts to the acquisition of a ‘‘theory’’ of separate minds. Only when infants can sense that others distinct from themselves can hold or entertain a mental state that is similar to one they sense themselves to be holding is the sharing of subjective experience or intersubjectivity possible. (Stern, 1985, p. 124)

The existence of this kind of intersubjective self opens the possibility of rather well-differentiated interpersonal relationships, at least from the second half of the 1st year onward. Moreover, most recently Stern (1995) has extensively underlined how from the 1st few months infants are capable of differentiating self from other and share the interpersonal flow of emotions and affects. Again, he explains this capacity in essentially representational terms, by reference to a complex network of several types of ‘‘procedural’’ representations (including ‘‘schemas of feeling shapes’’) organized in a global representation of ‘‘being-with-another-in-a-certain-way’’ (Stern, 1995, p. 93). Here Stern’s position seems to differ from that of Lewis and to be rather similar to that of Trevarthen when he calls upon the innate virtual other (indeed defined in similar procedural terms), with the difference that Stern focuses on how this global representation of ‘‘being-with-another’’ is the outcome of repeated experience. Now, one may argue that the capacity to build ‘‘schemas of feeling shapes’’ that characterize different types of interaction logically presupposes a prerepresentational capacity to experience them. Coming close to a nonrepresentationalist position, Stern has indeed argued that ‘‘affect, more than cognition, seems to determine whether one is engaged with an ‘it’ or another human being’’ (Stern, 1993, p. 214). However, Stern’s ultimate explanation of the infant’s capacity to share affects seems to be a representational one (or, at the least, he does not seem to provide a clear alternative). In addition, at no point does Stern suggest that the affective and/or representational capacities of the young infant are sufficient to allow for ‘‘nonbasic’’ emotions.

The idea that infants are incapable of ‘‘nonbasic’’ emotions, and its association with the infant’s assumed lack of cognitive development, is also supported by other authors who are otherwise known to support the primacy of affective relationships. Dunn, for instance, who focuses on the role of affective relationships in the family for the development of both self-awareness and understanding of others, states that: ‘‘It is clear that the development of
joy, fear, anger, shame, embarrassment, and surprise all depend upon cognitive changes in the child (Sroufe, 1979) and evidence for the development of pride, shame, and guilt during the third year is clearly relevant to the argument that the cognitive basis for children’s sense of self and other expands rapidly over this period” (Dunn, 1988, p. 80). Nevertheless, Dunn also proposes that the child’s development of an understanding of self and other might be somehow an effect of these “nonbasic” emotional experiences and not just their “cause”:

A number of lines of evidence from research on children’s emotional behavior within their families indicate that situations in which young children are experiencing jealousy or envy not only reveal but may well foster children’s most mature capabilities of argument and their ability to understand and anticipate others’ actions (Dunn, 1988; Dunn & Slomkowski, 1992), and experiences of shame and embarrassment may in themselves contribute to children’s self-consciousness, their reflection on their own abilities and performance, and those of others. (Dunn, 1994, p. 353)

These and similar remarks certainly bring Dunn closer to positions according to which infants that are too young to reflect on themselves and others might still be capable of “nonbasic” emotions. However, and again, this possibility is never made explicit, and Dunn still seems to believe that “nonbasic” emotions emerge during the 2nd and 3rd years (see the quotation in the introduction).

Alternative Models

Although the vast majority of authors agree that “nonbasic” emotions are “late-developers,” two models have been recently developed which are open to the possibility of their early emergence. These models, developed by Karen Caplovitz Barrett and by Michael Mascolo and Kurt Fischer, were presented for the first time in 1995 in an edited book specifically trying to reestablish the importance of “nonbasic” emotions in psychology. Both models view emotions as fundamentally relational processes involving organism and environment as appraised by the organism.

Barrett’s is a “functionalist model” focusing on shame and guilt but also incidentally referring to envy and, more recently, pride (Barrett, 1998a). The model is built around seven basic principles, in which shame and guilt always involve a real or imagined other, serve important intrapersonal and interpersonal regulatory functions, are associated with appreciations regarding self and other that may arise from “any level of cognitive sophistication” (e.g., the simple realization that “someone is looking at one as a bad person”), are associated with context-appropriate action tendencies, lead to (rather than result from) a metaawareness of self, do not emerge because of cognitive changes, and, finally, are charged with significance by relationships and socialization (Barrett, 1995, pp. 25–51). Another point repeatedly stressed by
Barrett is that emotions are not organized in a set of discrete categories, but according to a network of family resemblances (Wittgenstein, 1953).

Barrett clearly differentiates her position from that of authors who deny the presence of emotions such as shame, guilt, and pride in the 1st year. According to Barrett, emotions do not emerge as a whole at a particular age but in different forms in different contexts and ages, and asking when an emotion emerges is the wrong question: “. . . according to the present functionalist approach, a better question is ‘under what conditions are members of the shame and pride families observable at which ages?’” To the extent that the functions of shame or pride are served by the ongoing behavior, in an appropriate context, a member of those families is considered to be present” (Barrett, 1998b, p. 122, italics in the original). Contrary to most other authors, Barrett also explicitly rejects the cognitive paradigm, according to which the child is capable of “nonbasic” emotions only after the emergence of specific cognitive prerequisites such as object permanence or self-recognition. In fact, her point is that one should avoid setting any theoretical a priori for the emergence of any emotion. Eventually, the only assumption made in the principles mentioned above is that “nonbasic” emotions require a nonconceptual level of interpersonal awareness. More recently, Barrett seems to have somewhat revised her position and come to accept the view that the child needs developing standards, rules, and goals as well as the capacity to draw comparisons against them and recognition of self as an object (Barrett, 1998a, 1998b). However, she also notes that “although it is quite logical to suggest these abilities as prerequisites to shame and pride, the level of awareness or understanding that is needed for each of these is unclear. To the extent that the level of awareness needed is one that is present in early infancy, cognitive capacities should not place a constraint on the onset of emotions” (Barrett, 1998a, p. 117). In this sense it is interesting that although appraisal is central to her model (a general feature of cognitive models), Barrett had previously noted that “like any other aspect of the emotion process, appreciations are not viewed as necessary” and that “emotion communication from a conspecific” may initiate emotion before appraisal (Barrett, 1995, p. 36, italics in the original).

Nonetheless, Barrett does not expand on how early interpersonal awareness is possible and, when she comes closer to the issue, she makes use of notions which are typically expressed in terms of mental representations, such as Bowlby’s “working model” of self and other (Bowlby, 1980) and Klein’s good-versus-bad representation of self or mother (Klein, 1975). Also, her more recent acceptance of the idea that internalized standards, rules, or goals are prerequisites to the development of shame, pride, and guilt may appear to contradict the idea that (in some circumstances) young infants may be capable of something functionally similar to these emotions. Describing the development of guilt she has indeed stated that “Given the need to have some sense of the social standard of not harming people, as well as some
appreciation that one has harmed someone, it is unlikely that young infants [unlike toddlers] will display guilt in any context” (1998b, p. 80, italics added). Given the lack of evidence of early guilt and shame, Barrett may here be merely erring on the side of caution. However, she may also appear to dismiss the most original contribution of her theoretical model.

The model presented by Mascolo and Fischer (1995) shares several similarities with that of Barrett: It focuses on shame, guilt, and pride; it relies on a functional definition of emotions; it regards emotions as belonging to emotion families and as constituted by several components (appraisal, feeling, action tendency, etc.); it considers appraisal as the starting point of the emotional process; it considers appraisal as not necessarily involving complex cognitive capacities; and, above all, it regards emotional development as a continuous process and it is thus open to the presence of early forms of “nonbasic” emotions.

However, Mascolo and Fischer focus on the importance of individual skills more than does Barrett. Their distinctive contribution is the idea, derived from Fischer’s dynamic skills theory (Fischer, 1980), that the development of appraisal that leads through different forms of “nonbasic” emotions is in turn determined by the development of the individual’s “skills.” Skills are defined as “control systems for organizing or controlling one’s behavior (actions, perceptions, thoughts, and feelings) for a specific context, goal, and affective state” (Mascolo & Fischer, 1995, p. 69). Skills do not necessarily involve representations and their development is supposed to go through four basic tiers, each organized around a different skill unit: “reflexes” (beginning at birth), “sensorimotor actions” (beginning at about 3–4 months), “representations” (beginning at about 18–24 months), and “abstractions” (beginning at about 10–12 years). In addition, although Mascolo and Fischer emphasize that there is no such thing as an internalized skill, or a skill without context, they do not seem to believe that in the case of “nonbasic” emotions this needs to be a social context. Possibly, the major characteristic of interest here is indeed that their model predicts nonsocial (as well as nonrepresentational) forms of “nonbasic” emotions. In this sense Mascolo and Fischer appear to represent an exception in the literature.

However, closer examination of their model reveals that this may be the kind of exception that confirms the more general rule. The specific emotional reactions that these authors refer to and the terminology they use do not really diverge significantly from those of mainstream models of emotional development. Nonsocial and prerelational forms of pride and shame are supposed to emerge in the 1st year (with the appraisal of action–outcome contingencies), but they are referred to as “joy” and “distress” respectively (early forms of guilt are also referred to as “distress,” but they are supposed to involve the other). Indeed, Mascolo and Fischer use the terms “joy-
pride,' 'distress-shame,' and 'distress-guilt' only for infants of at least 18–24 months, use the labels 'pride' and 'shame' only for children of at least 2–3 years, and use 'guilt' only for children of at least 4–5 years. The reasons for these terminological choices are not entirely clear, but it is interesting to notice that 'nonbasic' labels are not used until 18–24 months, when the infant is supposed to move from the 'tier' of 'sensorimotor actions' to that of 'representations.' By then all the examples of 'nonbasic' emotions provided by Mascolo and Fischer also involve the presence of another person, and it is at this point that they notice how pride, shame, and guilt 'are social emotions, and so they naturally build on high support within the social context, especially at early developmental steps' (Mascolo & Fischer, 1995, p. 104).

In brief, not only do the vast majority of authors believe that 'nonbasic' emotions emerge for the first time during or after the 2nd year, but they almost invariably make two assumptions: that these emotions depend on the development of representation and that young infants are incapable of the necessary level of interpersonal awareness. The few authors who are more open to the presence of early 'nonbasic' emotions, on the contrary, seem to assume both that their origins are not dependent upon the development of higher forms of representation and that young infants are somehow capable of interpersonal awareness. It is also important to note that these two 'sets' of authors do identify different processes underlying these emotions (especially their early forms), but overall do not appear to intend referring to different emotional phenomena. Barrett, for instance, clearly states that she has a different opinion from that of most other authors on the developmental chronology of shame, guilt, and pride, and she does reject mainstream accounts of the underlying processes, but she never suggests that she is referring to fundamentally different emotions. The only exception here may be Mascolo and Fischer, who report, as examples of early 'nonbasic' emotions, instances of emotions that most other authors would consider as 'basic.' However, in describing these early instances Mascolo and Fischer use 'basic' labels, thus both making predictions and using terms that do not diverge significantly from those of mainstream cognitive developmental theories. Not only do the instances that they label using 'nonbasic' terms refer to older infants, but (even if incidentally) also they associate awareness of self and other with the emergence of representation.

This common association suggests that the issue of representation and that of interpersonal awareness may be somehow interdependent and raises the question—if this is the case—of which of the two is more fundamental for

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16 As mentioned before, the general impression is indeed that authors are not even referring to emotional phenomena different from those that laypeople would typically consider likely examples of 'nonbasic' emotions.
the way psychologists have come to conceive of early emotional development.

CONCLUSIONS

This article has explored current theories of emotional development in order to identify the assumptions that could explain the strong antagonism toward early “nonbasic” emotions pervading the literature. First, we reviewed the two authors with the most contrasting positions: Lewis and Trevarthen. Second, we identified two polarities that may explain this antagonism—a representational polarity and an “interpersonal awareness” polarity—and showed how these seem indeed to organize a great deal of the theoretical discourse around the development of “nonbasic” emotions. We now examine somewhat more closely the logical implications of these two polarities for the very possibility of early “nonbasic” emotions and their reciprocal relation.

Representationalism and Interpersonal Awareness

The representational polarity differentiates between those who believe that “nonbasic” emotions depend on the development of specific representational skills and those who, at least prima facie, do not. The first position, assumed by Lewis and many others, is by far the most prevalent in the literature. According to these authors not only “nonbasic” emotions, but the very capacity for interpersonal awareness, can only be explained in terms of complex representational capacities that appear during the 2nd year. At times, some of these authors seem to regard interpersonal awareness and conceptual awareness of self and other as practically the same thing (e.g., Mahler, Pine & Bergman, 1975; Lewis, 1987). Within developmental psychology this extreme representationalist position finds its roots in Piaget’s “late” idea of an infant egocentric to the point of social solipsism, and in his explanation of social development in terms of the development of abstract representational capacities. Today most authors would not refer to symbolic thought, as Piaget did, but rather to conceptual thinking (Lewis, 1995), multiple representations (Perner, 1991), imagination (Harris, 1989), meta representation (Leslie, 1987, 1988), and so on. But the core argument remains the same, namely that interpersonal awareness is dependent on relatively abstract forms of representation.

So, is a commitment to representationalism the reason so many authors deny the very possibility of early “nonbasic” emotions? Our review has also shown that it is possible to support a “softer” representationalist account and still be open to the possibility of early interpersonal awareness and, eventually, early “nonbasic” emotions. According to this position “nonbasic” emotions still depend on some form of representational ability, but one that is available to young infants. Stern, more explicitly, and sometimes Trevarthen,
more implicitly, seem to propose a similar “soft” representationalist account of interpersonal awareness. As far as “nonbasic” emotions are concerned this account is still relatively infrequent in the literature, but it is clearly used by several authors to explain many other forms of early social competency. Mandler (1988, 1992), for instance, calls upon early representation to explain imitation, motor recognition, manual signs, and the recall of absent objects, and Karmiloff-Smith (1992) has proposed a multilevel model of the development of representation to explain almost every aspect of development, including early face recognition, mutual gaze, joint attention, and early forms of humor (which may be considered as a kind of “nonbasic” emotion). Recently, Meltzoff (1994, 1996, 2000) has indeed come to invoke early representational skills to explain the infant’s solution of the problem of “others’ minds” (i.e., the “emergence” of interpersonal awareness). Applied to early “nonbasic” emotions, this position simply involves shifting back the timing of the standard explanation. In fact, the only difference between this “soft” and the more traditional “hard” representationalism is the level of abstraction of the representation used to explain interpersonal awareness and hence the potential for “nonbasic” emotions.

In brief, at least in principle, room for early “nonbasic” emotions can be found within both nonrepresentational and representational models, i.e., at either end of the representational polarity. However, no such space can be found within models that exclude interpersonal awareness from the young infant’s capacities. That “nonbasic” emotions require some sense of self in relation to other (and vice versa) seems indeed to be the only point on which all the authors considered here may clearly agree. Thus, the polarity determining whether “nonbasic” emotions are to be included or excluded from the younger infant’s capacities is the one regarding the possibility of early interpersonal awareness. On further reflection, the primary of this issue over that of representation should not surprise us. Whereas we can imagine most “basic” emotions being elicited by some changes in our relation with the world of things, the same does not hold true for “nonbasic” emotions. “Nonbasic” emotions can only occur in relation to “another” (real or imagined). So, for instance, hitting ourselves on the corner of a table may elicit anger and a tree falling close to us may elicit fear, but we would not often experience shyness, pride, concern, or guilt in front of a table or a tree. True, a child may feel concern for a broken teddy bear, but this is the kind of exception that confirms the rule, since a teddy bear is an anthropomorphized object. Some kind of sense of self and other in relation, i.e., some kind of interpersonal awareness, is thus a logical prerequisite of “nonbasic” emotions. This, then, is the answer to the question posed in the introduction: the majority of developmental psychologists believe that “nonbasic” emotions emerge for the first time during the 2nd year not because they are representationalists, but because they assume that younger infants are not capable of the necessary level of interpersonal awareness.
A Theoretical Frame of Reference for Early ‘‘Nonbasic’’ Emotions

As we have seen in the introduction, there is no clear evidence that ‘‘nonbasic’’ emotions are necessarily delayed until the 2nd year of life, and, on closer analysis, there is some evidence suggesting that early forms of these emotion may be actually present. So, in light of what has been expounded on so far, let us briefly consider how could early ‘‘nonbasic’’ emotions be possible.

One theoretical possibility is that ‘‘nonbasic’’ emotions do not, after all, involve an awareness of self and other. However, although the distinction usually drawn between ‘‘basic’’ and ‘‘nonbasic’’ emotions may be overly categorical (see also Ekman, 1994; Parkinson, 1996; Ben-Ze’ev & Oatley, 1996), most theorists, ourselves included, regard the perception of the other in relation to the self as fundamental to this distinction. This is not even much of a theoretical choice. ‘‘Nonbasic’’ emotions seem to owe their distinct status to being de facto always and necessarily socially ‘‘aware’’ emotions.

A second possibility is that ‘‘nonbasic’’ emotions do rely on a representation of self and other, but one that is available at an early age and which is perhaps even innate. Although this view has its adherents (at least as far as interpersonal awareness per se is concerned, e.g., Meltzoff, 1994, 1996, 2000), it fails to explain how a representation of the other can emerge in an individual if that individual cannot relate to the object of the representation before the representation emerges (the same problem posed by Bråten’s virtual other). Nativist theories, which invoke phylogenetic origins for such representations, themselves beg this very same question17 (for the problems presented by representationalism see Still & Costall, 1987, 1991; and Shannon, 1993).

The only viable possibility, in our view, appears to be one that allows early nonrepresentational access to the other in relation to self. According to long-established traditions within psychology as well as to a more recent renaissance to which we would associate Trevarthen and Barrett, such early relational knowledge is indeed possible. From this viewpoint interpersonal awareness should be understood as a continuous process rather than as an achievement at some point in time. This process is not seen as one in which a ‘‘self-contained’’ self, as it were, engages with a ‘‘self-contained’’ other, as if the infant were indeed confronted with the traditional problem of other (and private) minds. Both the self and the other must be self-evident in the relation, hence interpersonal awareness and knowledge itself naturally emerge and develop in the very public coregulation of self and other. Nearly 100 years ago Baldwin (who also believed in the presence of early ‘‘nonba-

17 In this sense, nativist theories are simply shifting the problem of how a ‘‘solipsistic’’ organism eventually becomes social from the level of ontogeny to that of phylogeny.
sic’ emotions\textsuperscript{18} noted that the notion of the individual was now so modified in psychology that: ‘‘... subjectivistic theories of knowledge, like the individualistic theories of political science, are soon to be laid away in the attics where old intellectual furniture is stored. The knower does not start out in isolation and then comes to some sort of agreement with others by ‘matching up’ his world of independent sensations and cognitions with theirs’’ (Baldwin, 1909, p. 211).

Since then, the point has been repeatedly made that knowledge of self and other emerges and resides in the process of relating itself rather than in a series of internalized abstractions (see Buber, 1937; MacMurray, 1961/1995). Rather concisely, Shotter has recently referred to this form of knowing as ‘‘knowing from,’’ defining it as ‘‘the kind of knowledge one only has from within a momentary relational circumstance’’ and which is prior to and more than the more famous (after Ryle, 1949) procedural ‘‘knowing how’’ and reflective ‘‘knowing that’’ (Shotter, 1998, p. 273). Several authors with an interest in development have also come to suggest that interpersonal awareness need not result from the inferential process necessitated by standard dualist models of private minds (e.g., Hobson, 1991; Fogel, 1993). Most of these authors focus on the significance of the altered space between the self and the other (the space of ‘‘we,’’ Nakano, 1996), the relation between self and other (e.g., Neisser, 1994), and between self and other in space (Butterworth & Jarrett, 1991). Neisser, for example, suggests that the self and the other are coperceived in engagement. Paraphrasing Gibson’s work on proprioception, Neisser argues that self and other are simultaneously perceived: ‘‘Egoreception accompanies alteroception like the other side of a coin . . . One perceives the other and coperceives the self’’ (Neisser, 1994, p. 400). Hence, according to Neisser the interpersonal self of young babies (as well as that of adults) need not be based on representational cognition simply because the difference between self and other is directly perceived in the course of social interaction: ‘‘... social exchanges are perceptible. What is perceived is not merely the other’s behavior, but its reciprocity with one’s own. Both participants are engaged in a mutual enterprise, and they are aware of that mutuality’’ (Neisser, 1994, p. 400).

Like Baldwin, some of these more recent authors also imply or explicitly suggest that this kind of relational knowing of self and other is associated with ‘‘instinctive’’ and later developing ‘‘reflective’’ emotions, as do many current authors, but he also stressed that young infants show several emotions that imply interpersonal awareness before reflective knowledge has emerged. In his own words these are ‘‘Manifestations or expressions of certain emotions which have both the organic and later the reflective form as well, such, for instance, as jealousy, fear, anger, and sympathy. These emotional expressions, together with the physical reactions which are shown by young children in what we call bashfulness and in the play instinct, are, to my mind, of great importance in the mental evolution upon which the social life is founded’’ (Baldwin, 1902, p. 197–198, italics in the original).
RETHINKING “NONBASIC” EMOTIONS

Quoting Charles Taylor, Shotter has noted that “The very way we walk, gesture, speak is shaped from the earliest moment by our awareness that we appear before others, that we stand in public space, and that this space is potentially one of respect or contempt, of pride or shame” (in Shotter, 1998, p. 271). Butterworth (1998) has suggested that early “nonbasic” emotions may involve the kind of direct perception of others’ intentions and emotions originally described by Michotte in his work on “emotions as functional relations” between individuals (Michotte, 1950) and somewhat similarly discussed by Stern in his work on “vitality affects” and “affect attunement” (Stern, 1985, 1993). One important theorist of emotions, Nico Frijda, has also hypothesized that the kind of sense of self and appraisal of events involved in the elicitation of emotions such as jealousy, guilt, and shame may most often be of a perceptual nonreflective kind and, thus, that these emotions may emerge earlier than is generally agreed (Frijda, 1993, p. 370).

Although there is to date only some evidence suggesting the possibility of early “nonbasic” emotions, there is considerable evidence showing (a) that young infants show a very early awareness of others in the form of a specific interest in human features such as movement, voice, and face and in the form of recognition of the emotions that they express (for a review see Walker-Andrews, 1997), (b) that awareness of self in the form of discrimination and recognition of some aspects of the self may also be present considerably earlier in life than hitherto believed (e.g., Bahrick & Watson, 1985; Bahrick, 1995; Van der Meer, Van der Weel, & Lee, 1995; for reviews see Butterworth, 1989, 1995), and most importantly (c) that knowledge of self and other may be from the start available in relation (Martin & Clark, 1982; Murray & Trevarthen, 1985; Stem, 1985; Nadel & Tremblay-Leveau, 1999).

In brief, on both logical and empirical grounds, the conditions for the possibility of “nonbasic” emotions could be met well within the 1st year of human infancy and without recourse to complex or even simple representational skills. A theoretical account of such possibility, therefore, need not look for a cutoff point dependent on an abstract notion of the self, of the other, or of their relation.

A wider acceptance of the existence of “nonbasic” emotions in young infants would also be consistent with broader trends in psychology: the recognition of “the competent neonate,” the appreciation of the significance of emotions, and a shift away from the individualistic cognitive paradigm. Obviously, to acknowledge the possibility of early “nonbasic” emotions is not to deny that they continue to develop and unfold: It is simply to recognize that the neonate may already be leading a rich relational and emotional life. The implications of this possibility are not only theoretical but also practical and even ethical—after all it was only recently that medical practice recognized the possibility of neonatal pain and acceded to demands for anesthesia during infant operations. If indeed young infants can experience guilt, shame,
concern, and other complex emotions, then we will need to take their feelings much more seriously.

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